



 EMERGING TECH RESEARCH

Climate Tech Report

VC trends and emerging opportunities

Q1
2022

REPORT PREVIEW

The full report is available through the PitchBook Platform.





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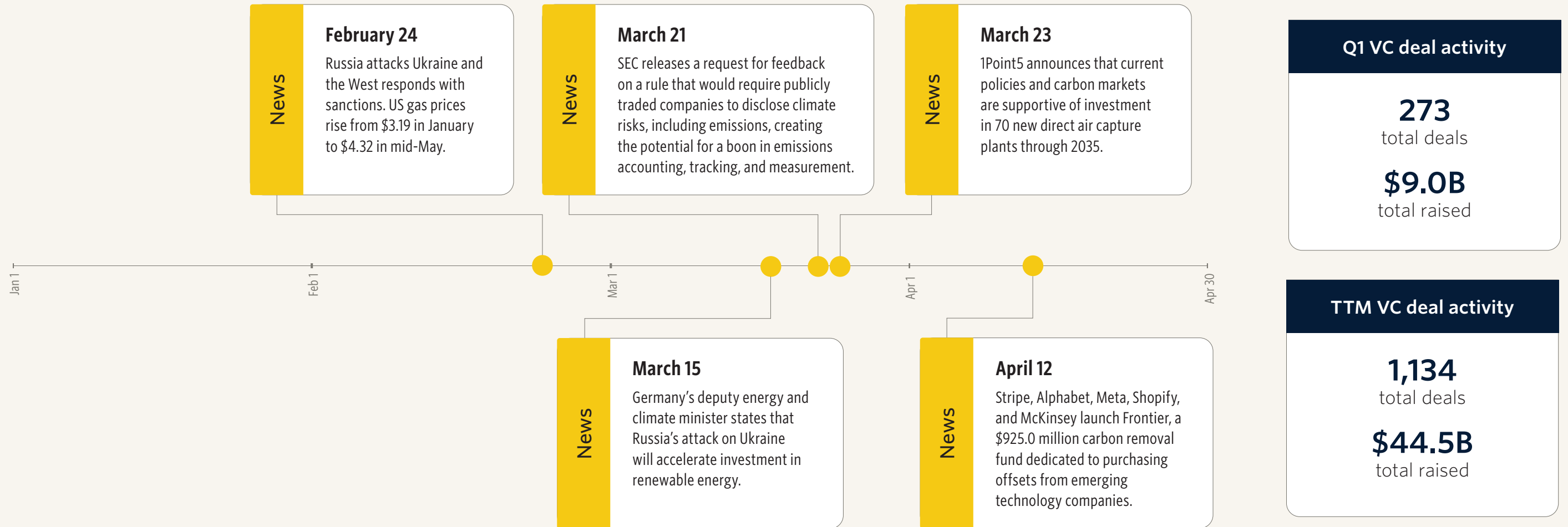
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Q1 2022 timeline

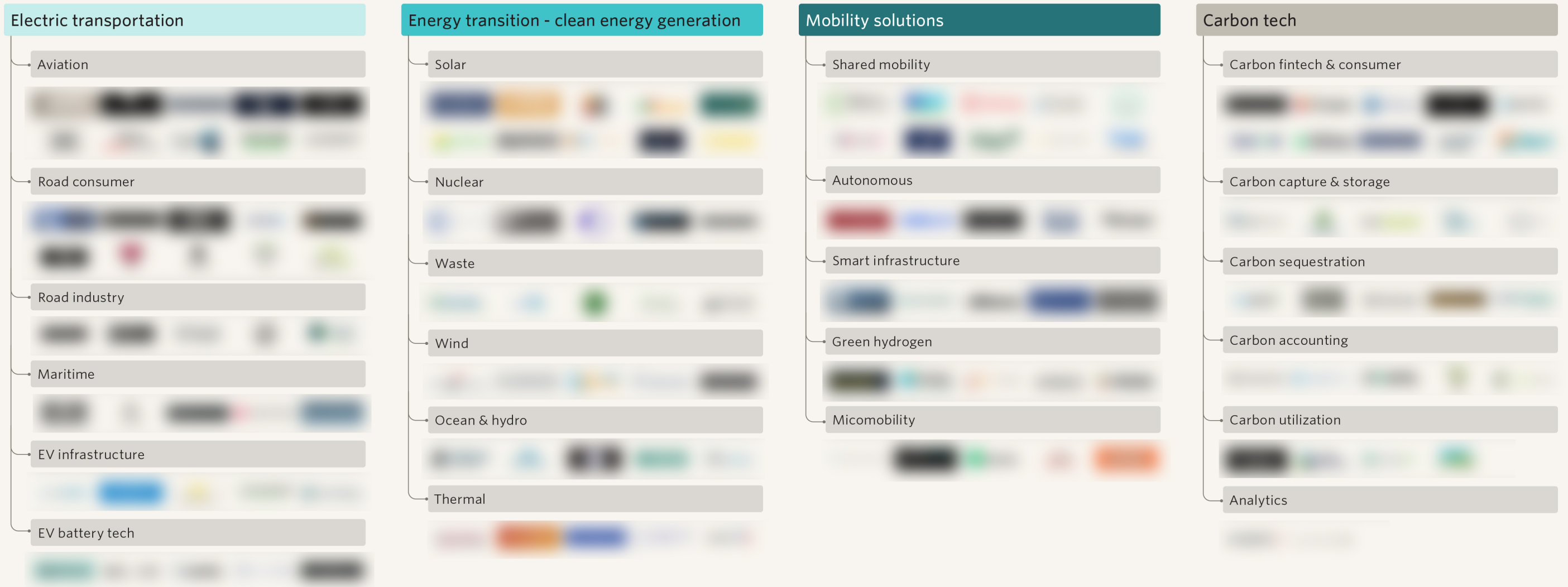




Climate tech VC ecosystem market map

[Click to view the interactive market map on the PitchBook Platform.](#)

Market map is a representative overview of venture-backed or growth-stage providers in each segment. Companies listed have received venture capital or other notable private investments.

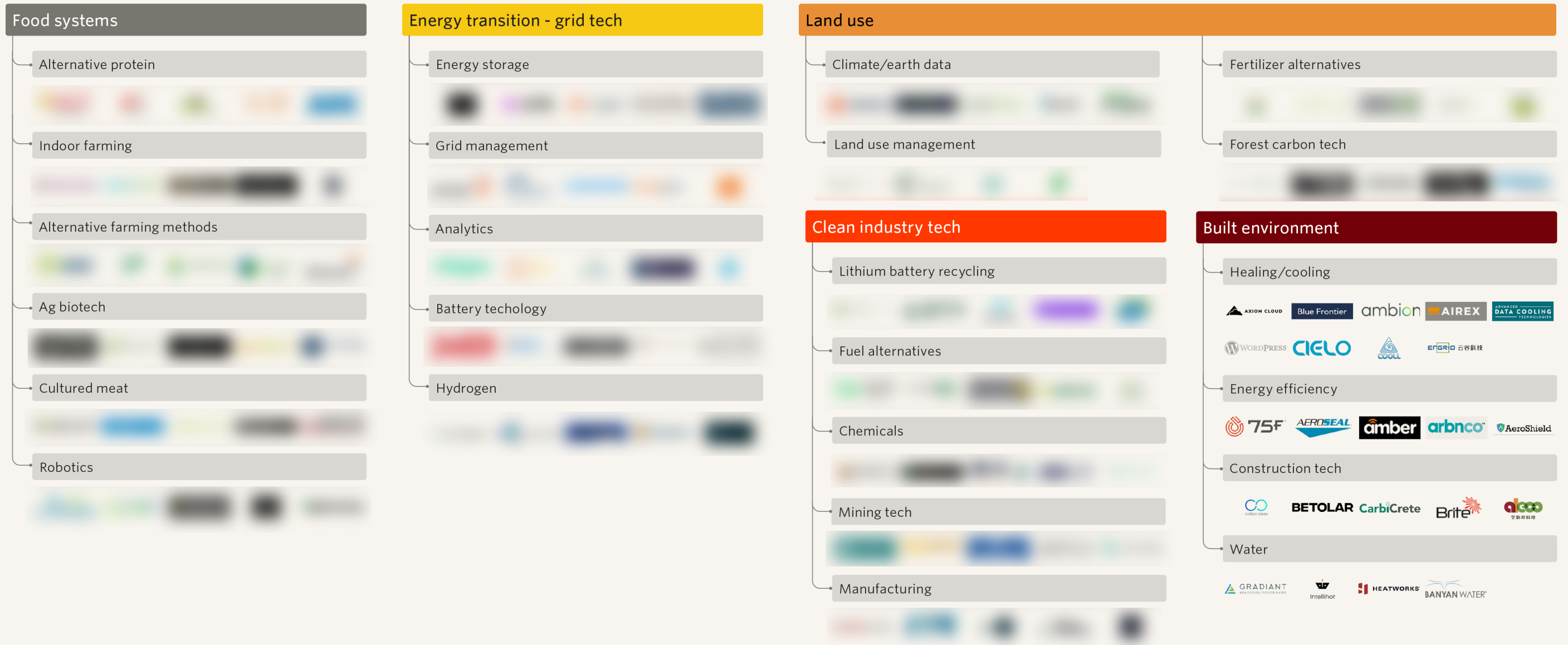




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VC activity

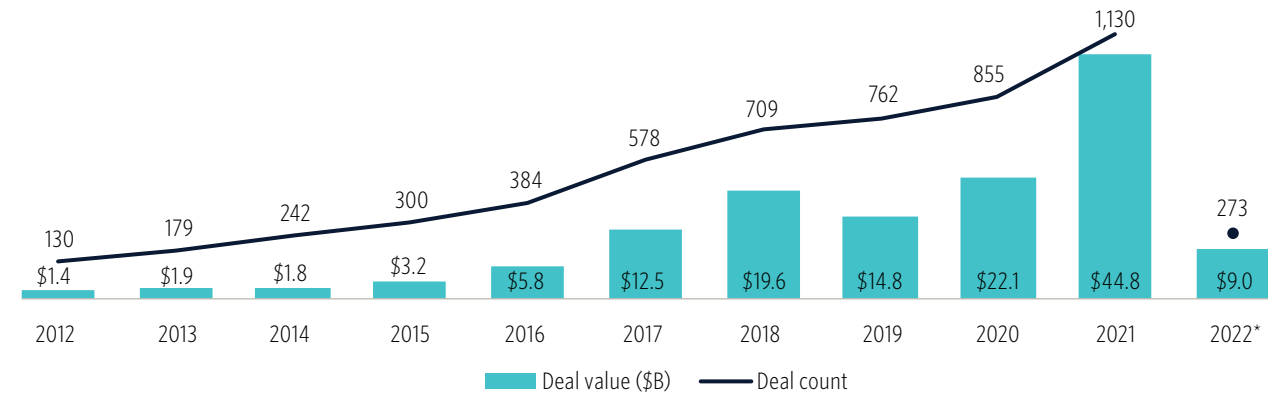
In Q1 2022 there were 273 VC-backed climate tech rounds worth \$9.0 billion. This compares to 283 rounds and \$11.2 billion per quarter, on average, in 2021, 214/\$5.5 billion per quarter in 2020, and 191/\$3.7 billion per quarter in 2019. Climate tech venture capital (VC) deals and dollars invested slowed modestly in Q1 relative to 2021's average rate, but angel & seed dollars invested in Q1 2022 were strong at \$283.3 million compared to \$700.4 million in all of 2021 and \$652.5 million in 2020. We observed the same trend in most spaces, with angel, seed, and early stages holding up while valuations of late-stage startups recalibrated downward.

Q1 2022 saw less investment than the average quarterly rate in 2021, but the quarter was still strong, potentially because the market had not begun to decline until after early January when many deals were already underway, and the attack on Ukraine did not occur until February 24. Climate tech investment (and other venture categories) could fall further in Q2 due to volatility and lower market valuations; however, in the long-term, the attack on Ukraine and resulting calls for energy independence in Europe are likely to accelerate climate tech investment, namely hydrogen, solar, batteries, nuclear, and wind.

We anticipate greater interest in hydrogen as Germany searches for alternatives to Russian gas. Germany powers much of its important manufacturing sector with natural gas, and a handful of German hydrogen companies are already working with companies in France and Luxembourg.

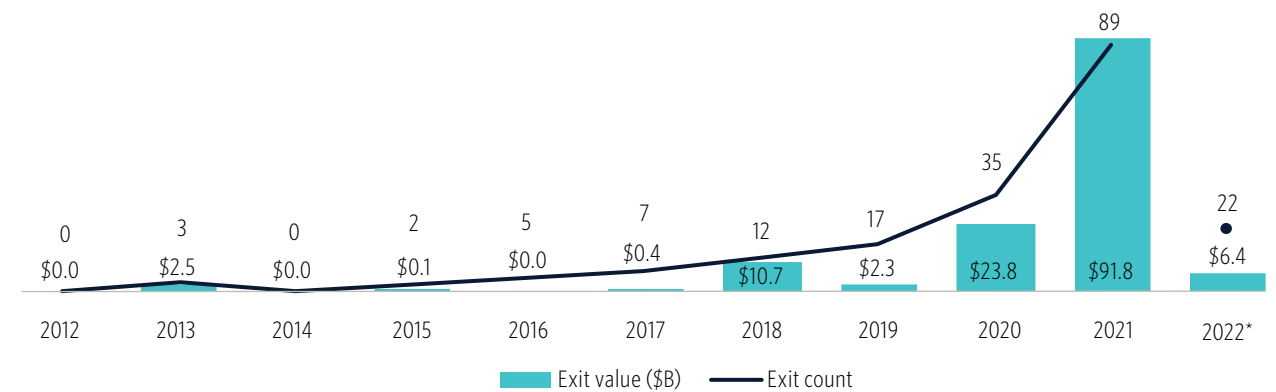
Callouts in Q1 2022 include an increase in dollars financed in PitchBook's "built environment" category (low-carbon cement, heating & cooling, and building efficiency). Q1 2022 saw \$503.8 million of investment in built environment compared to \$905.7 million in all of 2021, and \$351.2 million in 2020.

Figure 2. Climate tech VC deal activity



Source: PitchBook | Geography: Global | *As of March 31, 2022

Figure 3. Climate tech VC exit activity



Source: PitchBook | Geography: Global | *As of March 31, 2022



MINING TECH

Figure 17. Lithium startups

Company	Description	Location	Total capital raised (\$M)	Last round (\$M)	Last round date	Most recent valuation (\$M)	Select investors
Lilac Solutions	Lithium extraction from brine	Oakland, US	\$173.6	\$150.0	September 8, 2021	\$575.0	BMW i Ventures, Breakthrough Energy Ventures, E8, Earthshot Ventures, Harbor Street Ventures, iCatalysts, Lowercarbon Capital, MCJ Collective, Mercuria Energy Trading, One World, Presidio Ventures, PRIME Coalition, T. Rowe Price, The Grantham Foundation
Cornish Lithium	Tech-enabled lithium mining	Penryn, UK	\$50.0	\$24.3	November 25, 2021	\$75.0	Innovate UK, Mineral Securities Operations
Summit Nanotech	Direct lithium extraction (DLE) technology	Calgary, Canada	\$17.4	\$14.0	December 23, 2021	\$36.0	Alliance of Angels, BHP Ventures, Capricorn Investment Group, CleanTech North, Creative Destruction Lab, The51 Ventures, Third Derivative, Wisdom Venture Capital, Xora Innovation
British Lithium	UK-based lithium extraction	Roche, UK	\$4.7	\$4.0	March 17, 2021	N/A	EarlyMarket, Innovate UK
Green Lithium	Lithium hydroxide refinery	London, UK	\$3.1	\$2.3	May 9, 2022	N/A	Advanced Propulsion Centre, Ikigai Capital, Trafigura Group
Novalith	Lithium extraction using carbon dioxide	Sydney, AUS	\$1.8	\$1.8	October 25, 2021	N/A	Clean Energy Finance, The Grantham Foundation, Virescent Ventures

Source: PitchBook | Geography: Global | *As of March 31, 2022



SUMMIT NANOTECH



Founded
2018

Total raised:
\$17.4M

Last financing valuation:
\$36.0M

Last financing:
Raised \$14.0M Series A

Lead investors:
BHP Ventures, Capricorn
Partners, and Xora
Innovation

Overview

Summit Nanotech is developing a new direct lithium extraction technology, called denaLiTM, to help lithium miners efficiently extract lithium from brine. They seek to offer lithium extraction as a service for mine and land owners who then sell into the market. In 2022 they shipped a \$7.0 million pilot extraction unit to Chile in a 40 feet shipping container. The shipment will serve as their first test case, and they plan to run the technology 24 hours a day for three weeks. Summit hopes to capitalize on the increasing demand for lithium (30%+ growth per annum) due to the torrid expansion in electric vehicles. Successful mining IP is likely to earn outsized margins over time versus pure commodity players whose revenue and profit are more volatile, as they are subject to the balance of supply and demand for lithium.

Leadership

Founder and CEO Amanda Hall is a Canadian geophysicist with more than 20 years of experience in mining and exploration. Her background is in machine learning, analytics, potash, seismic data, and physics. She serves on the Advisory Board for the Canadian Energy & Climate Nexus.

Financing history

Summit Nanotech raised a \$14.0 million early-stage Series A round in December 2021 for a \$36.0 million post-money valuation and \$17.4 million in total capital. The company intends to use the capital to advance its denaLiTM DLE technology from the current pilot-scale stage to a larger demonstration-scale stage. Hall seeks to land contracts with six major lithium companies in the next five years and generate \$1.0 billion of annual revenue. Prior to Summit Nanotech’s Series A, they were awarded multiple grants from Women in Cleantech Challenge, Energy New Ventures Competition, and Sustainable Development Technology Canada. Hall states that Summit Nanotech is targeting a significant Series B in the near-future. Prior to their Series A they raised a \$1.0 million grant in November 2021, a \$2.5 million grant in June 2021, a \$1.13 million angel round in September 2020, a \$0.74 million accelerator/incubator investment in July 2020, and a \$1.5 million angel investment in May of 2020. They have raised from BHP Ventures, Capricorn Partners, and Xora Innovation. The angel was Third Derivative; the accelerators were Cleantech North, Wisdom Venture Capital, and 51 Ventures.

About PitchBook Emerging Tech Research

Independent, objective and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors and companies driving the asset class.

Our Emerging Tech Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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